

Title (en)

Frequency limitation method with time hysteresis used in quasi-resonant control

Title (de)

Frequenzeinschränkungsverfahren mit Zeithysterese, die für eine quasiresonante Steuerung verwendet wird

Title (fr)

Procédé de limitation de fréquence à hystérèse temporelle utilisé dans le contrôle quasi-résonant

Publication

EP 2264881 A3 20130724 (EN)

Application

EP 10251091 A 20100616

Priority

CN 200910303275 A 20090616

Abstract (en)

[origin: EP2264881A2] A frequency limitation method used in quasi-resonant control of a switching regulator is disclosed. The switching frequency is limited through setting a minimum time limit, such as a minimum switching period or a minimum OFF time. The minimum time limit may be a first time limit or a second time limit. The minimum time limit is changed into another value if the minimum voltage point approaches the minimum time limit point, so as to eliminate the audible noise.

IPC 8 full level

H02M 3/338 (2006.01); **H02M 3/156** (2006.01); **H02M 3/335** (2006.01)

CPC (source: EP US)

H02M 3/1563 (2013.01 - EP US); **H02M 3/338** (2013.01 - EP US); **Y02B 70/10** (2013.01 - EP US)

Citation (search report)

- [A] US 2008278974 A1 20081113 - WU TSUNG-HSIU [TW]
- [A] US 2007285953 A1 20071213 - KOO GWAN-BON [KR], et al

Cited by

EP2544347A1; WO2013004421A3; WO2019155328A1; US9276495B2; US10491125B2; US11870350B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)

BA ME RS

DOCDB simple family (publication)

EP 2264881 A2 20101222; **EP 2264881 A3 20130724**; **EP 2264881 B1 20150311**; CN 101645655 A 20100210; CN 101645655 B 20130710; US 2011007526 A1 20110113; US 8238123 B2 20120807

DOCDB simple family (application)

EP 10251091 A 20100616; CN 200910303275 A 20090616; US 81700210 A 20100616